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24234 SIMMONS PEI	7590 03/18/200 RRINE PLC	EXAMINER		
THIRD FLOOF	R TOWER PLACE	SPINELLA, KEVIN		
22 SOUTH LINN STREET IOWA CITY, IA 52240			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Comments	10/707,914	WITHERSPOON, WILLIAM				
Office Action Summary	Examiner	Art Unit				
	KEVIN SPINELLA	2885				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 14 Ja	nuary 2008					
<i>i</i> —	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
•	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
oloood in absordance with the practice differ E	x parte quayre, 1000 o.b. 11, 10	0.0.210.				
Disposition of Claims						
4)⊠ Claim(s) <u>2,3,5,7,9-13,16-22 and 24-26</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) <u>2,3,5,7,9-13,16-22 and 24-26</u> is/are re	iected					
7) Claim(s) is/are objected to.	jocioa.					
· <u> </u>	alastian raquirament					
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9)⊠ The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>7/31/2007</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
,	, , ,					
Applicant may not request that any objection to the o		• •				
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal Pa	nte				

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### **DETAILED ACTION**

# Response to Amendment

1. The amendment filed 1/14/2008 has been entered. Currently, Claims 2, 3, 5, 7, 9-13, 16-22, and 24-26 are pending in the application.

## Specification

2. The disclosure is objected to because the phrase "the claimant believes that" at the beginning of the sentence in paragraph 21, lines 19-20 should be omitted.

Appropriate correction is required.

# Claim Objections

3. Claims 2, 13, and 21 are objected to because the limitation of "an illumination angle of approximately fifty degrees or greater" does not specify whether or not the 3illumination angle is relative to a horizontal or vertical (i.e. optical) axis of each LED, and therefore, is unclear. Appropriate correction is required.

# Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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- 5. Claim 2 is rejected under 35 U.S.C. 102(e) as being anticipated by Nolan et al. (US Publication 2003/00721145 A1, hereafter Nolan).
- 6. Nolan teaches a system for illumination (Title, Figure 1, Figure 3, Figure 4, Figure 6) comprising: an array 40 (Figure 4, paragraph 32, lines 1-2) of light emitting diodes (LEDs) (paragraph 32, line 5: "LED lamps 68 in a parallel array") comprising a pattern of rows (Figure 4) wherein the axis of each row is parallel (Figure 4, paragraph 32, line 5) to the axis of each other row (Figure 4) and wherein each LED 68 has an illumination angle of approximately fifty degrees or greater (Figure 3, light emitting diodes are operationally required to possess an illumination angle which describes the manner in which light is emitted therefrom, an illumination angle of fifty degrees or greater relative to the horizontal axis (i.e. axis perpendicular to optical axis) of each LED constitutes an LED that emits in a substantially forward or outward direction as opposed to a sideways direction; accordingly, LED lamps 68 as shown in Figure 3 are operationally required to emit light in a substantially forward or outward direction in order to illuminate panel 70, and therefore must comprise illumination angles of approximately 50 degrees or greater relative to the horizontal axis); a direct current power source 30 (Figure 1, paragraph 30, lines 1-3: "low voltage power supply 30 further includes transformer 32 converting 110 and 220 AC current to low voltage DC current") coupled to (paragraph 32, line 3: "DC contact points 64") to said array 40 (Figure 4, paragraph 32, lines 1-2); a predetermined rectangular (Figure 1) ceiling tile frame 100 (Figure 1, paragraph 29, line 6: "ceiling

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100") comprising a plurality of rectangular (Figure 1) openings (Figure 1, openings constitute the spaces between the frame filled by the flush mounted ceiling housings 22, see also Figure 6); a translucent panel 70 (Figure 3, Figure 6; paragraph 34, lines 1-2: "colorized diffusion panel 70 disperses the light and spreads it about the illuminated area"), having a front side (Figure 6) and a back side (Figure 6), said panel 70 (Figure 3, Figure 6) disposed in (Figure 6, disposed in flush mounted ceiling housing 22 which is disposed in) one of said plurality of rectangular (Figure 1) openings (Figure 1, openings constitute the spaces between the frame filled by the flush mounted ceiling housings 22, see also Figure 6) and positioned (Figure 3, Figure 6) at a distance from (Figure 3, Figure 6) from said array 40 (Figure 4, paragraph 32, lines 1-2) of LEDs 68 and oriented in a manner (Figure 3, Figure 6) so as to be uniformly lighted from said back side (Figure 3, Figure 6) by said array 40 (Figure 4, paragraph 32, lines 1-2), and wherein the array of LEDs 68 is disposed above one (Figure 6) of said plurality of rectangular (Figure 1) openings (Figure 1, openings constitute the spaces between the frame filled by the flush mounted ceiling housings 22, see also Figure 6) and positioned (Figure 6) so as to uniformly light (Figure 6) the space in the opening (Figure 1, openings constitute the spaces between the frame filled by the flush mounted ceiling housings 22, see also Figure 6).

# Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 8. Claims 3, 5, 7, 9, 10, 13, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nolan in view of McManigal (US Patent No.: 5,251,392, hereafter McManigal).
- 9. In regard to Claim 3, Nolan teaches said array 40 (Figure 4, paragraph 32, lines 1-2) is disposed above (Figure 6) said predetermined rectangular (Figure 1) ceiling tile frame 100 (Figure 1); said array 40 (Figure 4, paragraph 32, lines 1-2) is disposed to directly and uniformly illuminate (Figure 3, Figure 6, array light source is operationally required to directly and uniformly illuminate) a back side (Figure 3, Figure 6) of the translucent panel 70 (Figure 3, Figure 6). Nolan lacks said translucent panel having a decorative static image disposed thereon so as to be visible from said front side.
- 10. McManigal teaches an artificial window (Title) lighting device (Figure 3) with translucent panel 24 (Figure 3; Col. 3, line 1: "sheet 24 is translucent") having a decorative static image 25 (Figure 3; Col. 3, lines 4-9, Col. 7, lines 11-20) disposed thereon (Figure 3) so as to be visible from said front side (Figure 3, see also decorative static image 20 in Figures 1 and 2; Col. 2, lines 47-50, Col. 2, lines 64-67). McManigal teaches a scene or picture is produced on a film or transparency, and a "window" effect is created (Figure 1, Col. 1, lines 9-14). Such implementation also enhances the aesthetics of the lighting device.

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11. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the decorative static image of the artificial window lighting device of McManigal in combination with the translucent panel of the LED ceiling light fixture of Nolan in order to allow for creation of a "window" effect for the viewer as well as to further enhance aesthetics of the LED ceiling light fixture.

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12. In regard to Claim 5, Nolan teaches said array 40 (Figure 4, paragraph 32, lines 1-2) of LEDs 68 (Figure 4) is elevated above (Figure 1, light sources mounted in flush housing 22 are operationally required to be elevated above) said predetermined rectangular (Figure 1) ceiling tile frame 100 (Figure 1, paragraph 29, line 6: "ceiling 100") in an LED lamp assembly (Figure 1, Figure 6) comprising a hood with opposing end risers (paragraph 35, line 4: "ceiling housing 22" constitutes both a hood (i.e. top portion) and opposing end risers (i.e. sidewall portions) as shown in Figure 6), wherein the opposing end risers (Figure 1, Figure 6, i.e. sidewall portions of housing 22) displace (Figure 6) said array 40 (Figure 4, paragraph 32, lines 1-2) from said translucent panel 70 (Figure 3, Figure 6; paragraph 34, lines 1-2) at a distance (Figure 6) so that said array 40 (Figure 4, paragraph 32, lines 1-2) uniformly lights (Figur3, Figure 6, operationally required to uniformly illuminate) all of said translucent panel 70 (Figure 3, Figure 6, paragraph 34, lines 1-2); and wherein the opposing end risers (Figure 1, Figure 6, i.e. sidewall portions of housing 22) create a region of space (Figure 6) between said array 40 (Figure 4, paragraph 32, lines 1-2) and one of said plurality of rectangular (Figure 1) openings (Figure 1, openings constitute the spaces between the

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frame filled by the flush mounted ceiling housings 22, see also Figure 6) that allows said translucent panel 70 (Figure 3, Figure 6; paragraph 34, lines 1-2) to be inserted in (Figure 3, Figure 6) one of said plurality of rectangular (Figure 1) openings (Figure 1, openings constitute the spaces between the frame filled by the flush mounted ceiling housings 22, see also Figure 6) without a need to bend or flex (Figure 3, Figure 6, no need to bend or flex) said translucent panel 70 (Figure 3, Figure 6; paragraph 34, lines 1-2) during insertion (Figure 3, Figure 6).

- 13. In regard to Claim 7, McManigal teaches a translucent panel 24 (Figure 3; Col. 3, line 1: "sheet 24 is translucent") having a decorative static image 25 (Figure 3; Col. 3, lines 4-9, Col. 7, lines 11-20) of a sky with a foreground of clouds (Figure 1) disposed thereon (Figure 3, see also decorative static image 20 in Figures 1 and 2; Col. 2, lines 47-50: "scene appears at 20 in the artificial window 15" and "note for example the depicted road, trees, sky, and clouds", Col. 2, lines 64-67). See motivation to combine references as previously described above.
- 14. In regard to Claim 9, Nolan teaches a hood and support structure (Figure 1, paragraph 35, line 4: "ceiling housing 22" constitutes both a hood (i.e. top portion) and opposing end risers (i.e. sidewall portions) as shown in Figure 6) of said array 40 (Figure 4, paragraph 32, lines 1-2).

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- 15. Although Nolan and McManigal lack said hood and support structure are comprised of aluminum, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate said hood and support structure to be comprised of the notoriously well known metal aluminum in order to allow for simultaneous strong support, efficient heat dissipation, and high reflectivity for the attached LED array, and since it has been held by the courts that selection of a prior art material on the basis of its suitability for its intended purpose is within the level of ordinary skill. *In re Leshing*, 125 USPQ 416 (CCPA 1960) and *Sinclair & Carroll Co. v. Interchemical Corp.*, 65 USPQ 297 (1945).
- 16. In regard to Claim 10, although Nolan and McManigal lack said predetermined rectangular ceiling tile frame is non-ferrous, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate said predetermined rectangular ceiling tile frame to be made of a non-ferrous material in order to allow for a ceiling tile frame not easily prone to rust as a result of any proximate moisture and also capable of use in areas consisting of high magnetic fields, and since it has been held by the courts that selection of a prior art material on the basis of its suitability for its intended purpose is within the level of ordinary skill. *In re Leshing*, 125 USPQ 416 (CCPA 1960) and *Sinclair & Carroll Co. v. Interchemical Corp.*, 65 USPQ 297 (1945).

17. In regard to Claim 13, Nolan teaches a source of light in a lamp fixture (Title, Figure 1, Figure 3, Figure 4, Figure 6) comprising an array 40 (Figure 4, paragraph 32, lines 1-2) of light emitting diodes (LEDs) (paragraph 32, line 5: "LED lamps 68 in a parallel array") comprising a pattern of rows (Figure 4) wherein the axis of each row is parallel (Figure 4, paragraph 32, line 5) to the axis of each other row (Figure 4) and wherein each LED 68 has an illumination angle of approximately fifty degrees or greater (Figure 3, light emitting diodes are operationally required to possess an illumination angle which describes the manner in which light is emitted therefrom, an illumination angle of fifty degrees or greater relative to the horizontal axis (i.e. axis perpendicular to optical axis) of each LED constitutes an LED that emits in a substantially forward or outward direction as opposed to a sideways direction; accordingly, LED lamps 68 as shown in Figure 3 are operationally required to emit light in a substantially forward or outward direction in order to illuminate panel 70, and therefore must comprise illumination angles of approximately 50 degrees or greater relative to the horizontal axis); a power source 30 (Figure 1, paragraph 30, lines 1-3: "low voltage power supply 30 further includes transformer 32 converting 110 and 220 AC current to low voltage DC current") coupled to (paragraph 32, line 3: "DC contact points 64") said source of light 40 (Figure 4, paragraph 32, lines 1-2); a predetermined rectangular (Figure 1) ceiling tile frame 100 (Figure 1, paragraph 29, line 6: "ceiling 100") comprising a plurality of rectangular (Figure 1) openings (Figure 1, openings constitute the spaces filled by the flush mounted ceiling housings 22, see also Figure 6); a translucent panel 70 (Figure 3, Figure 6; paragraph 34, lines 1-2: "colorized diffusion panel 70 disperses the light and

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spreads it about the illuminated area"), having a front side (Figure 6) and a back side (Figure 6), said panel 70 (Figure 3, Figure 6) disposed in (Figure 6, disposed in flush mounted ceiling housing 22 which is disposed in) one of said plurality of rectangular openings (Figure 1) and positioned (Figure 3, Figure 6) at a distance from (Figure 3, Figure 6) from said array 40 (Figure 4, paragraph 32, lines 1-2) of LEDs 68 and oriented in a manner (Figure 3, Figure 6) so as to be uniformly lighted from said back side (Figure 3, Figure 6) by said array 40 (Figure 4, paragraph 32, lines 1-2), said lamp fixture (Title, Figure 1, Figure 6) and said predetermined rectangular (Figure 1) ceiling tile frame 100 (Figure 1) separated by (Figure 1) two risers (Figure 1, paragraph 35, line 4: "ceiling housing 22" constitutes two opposing end risers (i.e. sidewall portions) as shown in Figure 6) that are positioned (Figure 1) on opposite ends (Figure 1) of said lamp fixture (Figure 6) so that a void is created between (Figure 1, Figure 6) the two risers (Figure 1, paragraph 35, line 4: "ceiling housing 22" constitutes two opposing end risers (i.e. sidewall portions) as shown in Figure 6) allowing for insertion (Figure 3, Figure 6) of said translucent panel 70 (Figure 3, Figure 6) in said predetermined rectangular (Figure 1) ceiling tile frame 100 (Figure 1) at a position below (Figure 1) said lamp fixture (Figure 1, Figure 6), the void (Figure 1, Figure 6) allowing for insertion (Figure 3, Figure 6) of said translucent panel 70 (Figure 3, Figure 6) without a need to curve (Figure 6) said translucent panel 70 (Figure 3, Figure 6) during the insertion (Figure 3, Figure 6).

18. Nolan lacks said translucent panel comprising a decorative static image thereon of a scene of a sky with a foreground.

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19. McManigal teaches an artificial window (Title) lighting device (Figure 3) with a translucent panel 24 (Figure 3; Col. 3, line 1: "sheet 24 is translucent") having a decorative static image 25 (Figure 3; Col. 3, lines 4-9, Col. 7, lines 11-20) of a scene of a sky with a foreground (Figure 1) disposed thereon (Figure 3, see also decorative static image 20 in Figures 1 and 2; Col. 2, lines 47-50: "scene appears at 20 in the artificial window 15" and "note for example the depicted road, trees, sky, and clouds", Col. 2, lines 64-67). McManigal teaches a scene or picture is produced on a film or transparency, and a "window" effect is created (Figure 1, Col. 1, lines 9-14). Such implementation also enhances the aesthetics of the lighting device.

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- 20. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the decorative static image of the artificial window lighting device of McManigal in combination with the translucent panel of the LED ceiling light fixture of Nolan in order to allow for creation of a "window" effect for the viewer as well as to further enhance aesthetics for the LED ceiling light fixture.
- 21. In regard to Claim 16, Nolan teaches said power source 30 is a direct current power source (Figure 1, paragraph 30, lines 1-3: "low voltage power supply 30 further includes transformer 32 converting 110 and 220 AC current to low voltage DC current") and where said translucent panel 70 (Figure 3, Figure 6) is further positioned (Figure 3, Figure 6) with respect to said array 40 (Figure 4, paragraph 32, lines 1-2) of LEDs 68 and oriented in a manner (Figure 3, Figure 6) so as to be uniformly lighted from said back side (Figure 3, Figure 6) by said array 40 (Figure 4, paragraph 32, lines 1-2).

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22. Claims 11, 12, 21, 22, and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Damadian et al. (US Patent No.: 6,922,055 B1, hereafter Damadian) in view of Nolan.

- 23. In regard to Claims 11, 21, and 22, Damadian teaches a magnetic resonance imaging device (Title, Figures 1-2) in a room 10 (Figures 1-2). Damadian also teaches fixtures such as overhead lights (not shown) that are secured to the ceiling 70 (Col. 8, lines 62-63).
- 24. Damadian lacks said array is disposed in an overhead position in a room containing a magnetic resonance imaging system, whereby said array comprises a pattern of rows wherein the axis of each row is parallel to the axis of each other row and wherein each LED has an illumination angle of approximately fifty degrees or greater; a direct current power source coupled to said array' wherein said array of LEDs is disposed above an opening by a plurality of risers, said plurality of risers positioning said array of LEDs at a distance from the opening so as to uniformly light the space in the opening, and the opening being defined by a frame.
- 25. Nolan teaches all of the aforementioned limitations as previously discussed in paragraphs 6 and 17 above. Nolan teaches a lighting fixture utilizing a plurality of bright white LEDs to produce a high lumen output ceiling light fixture, which does not require replacement of any bulbs or lighting tubes during the reasonable life of the fixture (paragraph 15).

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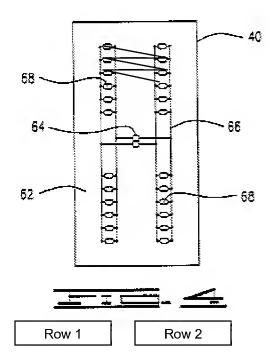
26. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the LED ceiling light fixture and configuration of Nolan in combination with the ceiling overhead lights of the magnetic resonance imaging room of Damadian in order to allow for a high lumen output ceiling light fixture, which does not require replacement of any bulbs or lighting tubes during the reasonable life of the fixture.

- 27. In regard to Claim 12, Damadian teaches said predetermined rectangular (Figure 1) ceiling tile frame 70 (Figure 1) is a component (Figure 1) of a fixture (Col. 8, lines 62-63) disposed on (Figure 1) a non-hung grid ceiling (Figure 1) of said room 10 (Figure 1). Nolan teaches a fixture 20 (paragraph 29, line 9) disposed below (Figure 1) a non-hung ceiling (Figure 1, top ceiling portion 100).
- 28. In regard to Claim 24, Nolan teaches a translucent panel 70 (Figure 3, Figure 6; paragraph 34, lines 1-2: "colorized diffusion panel 70 disperses the light and spreads it about the illuminated area"), having a front side (Figure 6) and a back side (Figure 6), said panel 70 (Figure 3, Figure 6) disposed in (Figure 6, disposed in flush mounted ceiling housing 22 which is disposed in) the opening (Figure 1, openings constitute the spaces between the frame filled by the flush mounted ceiling housings 22, see also Figure 6) and positioned (Figure 3, Figure 6) so as to be uniformly and directly lighted

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from said back side (Figure 3, Figure 6) by said array 40 (Figure 4, paragraph 32, lines 1-2). See motivation to combine references as previously discussed above.

- 29. In regard to Claim 25, Nolan teaches the pattern of rows (Figure 4) positioned (Figure 4) so that the LEDs 68 create a grid (Figure 4) of perpendicular rows and columns (Figure 4).
- 30. In regard to Claim 26, Nolan teaches certain LEDs 68 in adjacent rows (Figure 4) are offset from each other (see attached Figure 4, diagonal space exists between the LEDs so that LEDs are offset from each other by a distance) and not in perpendicular alignment (see diagonal spacing lines in attached Figure 4) with the axes of the pattern of rows (Figure 4).



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31. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Damadian as modified by Nolan, and further in view of McManigal.

- 32. In regard to Claim 17, Damadian teaches a magnetic resonance imaging device (Title, Figures 1-2) and room 10 (Figures 1-2). Damadian also teaches fixtures such as overhead lights (not shown) that are secured to the ceiling 70 (Col. 8, lines 62-63).
- 33. Damadian lacks the limitations of Claim 13 and 16 as previously discussed in the rejections of Claim 13 and 16 in paragraphs 17 and 21 above. Damadian also lacks said array is disposed above a ceiling of a room containing a magnetic resonance imaging system and wherein said array is shrouded by an aluminum hood disposed so as to reflect light downward through the panel.
- 34. Nolan teaches the limitations as previously discussed in paragraphs 17 and 21 above. Nolan also teaches an array 40 (Figure 4, paragraph 32, lines 1-2) disposed above (Figure 1, Figure 6) a ceiling 100 of a room (Figure 1) and said array 40 (Figure 4, paragraph 32, lines 1-2) shrouded by a hood (paragraph 35, line 4: "ceiling housing 22" constitutes both a hood and opposing end risers as shown in Figure 6, opposing end risers are opposing sidewalls of hood housing 22) disposed so as to reflect light downward (Figure 6) through the panel 70 (Figure 3, Figure 6). Nolan teaches a lighting fixture utilizing a plurality of bright white LEDs to produce a high lumen output ceiling light fixture, which does not require replacement of any bulbs or lighting tubes during the reasonable life of the fixture (paragraph 15).

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35. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the LED ceiling light fixture and configuration of Nolan in combination with the ceiling overhead lights of the magnetic resonance imaging room of Damadian in order to allow for a high lumen output ceiling light fixture, which does not require replacement of any bulbs or lighting tubes during the reasonable life of the fixture.

- 36. Damadian and Nolan lack said translucent panel having a decorative static image thereon of a scene of a sky with a foreground.
- 37. McManigal teaches a translucent panel 24 (Figure 3; Col. 3, line 1: "sheet 24 is translucent") having a decorative static image 25 (Figure 3; Col. 3, lines 4-9, Col. 7, lines 11-20) of a scene of a sky with a foreground (Figure 1) disposed thereon (Figure 3, see also decorative static image 20 in Figures 1 and 2; Col. 2, lines 47-50: "scene appears at 20 in the artificial window 15" and "note for example the depicted road, trees, sky, and clouds", Col. 2, lines 64-67). McManigal teaches a scene or picture is produced on a film or transparency, and a "window" effect is created (Figure 1, Col. 1, lines 9-14). Such implementation also enhances the aesthetics of the lighting device.
- 38. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the ceiling overhead lights of the magnetic resonance imaging room of Damadian in combination with the LED ceiling light fixture and configuration of Nolan by incorporating the decorative static image of the artificial window lighting device of McManigal in order to allow for creation of a "window" effect for the viewer as well as to further enhance aesthetics of the LED ceiling light fixture.

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39. Although Damadian, Nolan, and McManigal lack an aluminum hood, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate said hood to be comprised of the notoriously well known metal aluminum in order to allow for simultaneous strong support, efficient heat dissipation, and high reflectivity for the attached LED array, and since it has been held by the courts that selection of a prior art material on the basis of its suitability for its intended purpose is within the level of ordinary skill. *In re Leshing*, 125 USPQ 416 (CCPA 1960) and *Sinclair & Carroll Co. v. Interchemical Corp.*, 65 USPQ 297 (1945).

- 40. In regard to Claim 18, Damadian teaches a horizontal resting platform 54 (Figure 1) for a patient 56 (Figure 1) lying horizontally (Figure 1) on said horizontal platform 54 (Figure 1) waiting to undergo a procedure (Figure 1) with said magnetic resonance imaging system (Title).
- 41. Although Damadian, Nolan, and McManigal lack said scene of a sky with a foreground having a predetermined orientation with respect to a zenith for a patient, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate said scene of a sky with a foreground having a predetermined orientation with respect to a zenith for a patient, since the selection of such is an aesthetic choice that is always made with respect to an intended viewer to create a more visually pleasing environment and, since the courts have stated that matters relating to ornamentation only which have no mechanical function cannot be relied upon

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to patentably distinguish the claimed invention from the prior art. *In re Seid*, 161 F.2d 229, 73 USPQ 431 (CCPA 1947).

- 42. In regard to Claim 19, although Damadian, Nolan, and McManigal lack said risers made of aluminum, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate said risers to be comprised of the notoriously well known metal aluminum in order to allow for simultaneous strong support, efficient heat dissipation, and high reflectivity for the attached LED array, and since it has been held by the courts that selection of a prior art material on the basis of its suitability for its intended purpose is within the level of ordinary skill. *In re Leshing*, 125 USPQ 416 (CCPA 1960) and *Sinclair & Carroll Co. v. Interchemical Corp.*, 65 USPQ 297 (1945).
- 43. In regard to Claim 20, Nolan teaches said direct current power source 30 (Figure 1, paragraph 30, lines 1-3: "low voltage power supply 30 further includes transformer 32 converting 110 and 220 AC current to low voltage DC current") located outside (Figure 1) of said room below (Figure 1). See motivation to combine references as previously described above.

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# Response to Arguments

44. Applicant's arguments filed 1/14/2008 in pages 9-13 of the Remarks section have been fully considered but they are not persuasive.

- 45. In response to applicant's argument that Nolan does not disclose obtaining a uniform distribution of light by utilizing an array of LEDs arranged in a pattern of rows and where the LEDs have an illumination angle of approximately fifty degrees or greater, the examiner disagrees as indicated in the rejections above.
- 46. Figure 4 as is shown in the Nolan reference clearly shows an array of LEDs 68 arranged in a pattern of rows. Further, Nolan teaches bright white LED lamps 68 in parallel array (paragraph 32, line 5). Nolan teaches an LED 68 illumination angle of approximately fifty degrees or greater (see Figure 3, light emitting diodes are operationally required to possess an illumination angle which describes the manner in which light is emitted therefrom, an illumination angle of fifty degrees or greater relative to the horizontal axis (i.e. axis perpendicular to optical axis) of each LED constitutes an LED that emits in a substantially forward or outward direction as opposed to a sideways direction; accordingly, LED lamps 68 as shown in Figure 3 are operationally required to emit light in a substantially forward or outward direction in order to illuminate panel 70, and therefore must comprise illumination angles of approximately 50 degrees or greater relative to the horizontal axis). As the applicant has not described to what axis the illumination angled is measured there to, the above interpretation is both valid and acceptable.

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47. In response to applicant's argument that Nolan teaches the way to uniformly illuminate an illuminated area is to non-uniformly illuminate a diffusion panel, the examiner notes that nowhere in the disclosure of Nolan is this stated. In fact, the placement of the LED light source and utilization of the LED array within the lighting fixture of Nolan allows for uniform light distribution (i.e. each LED 68 emits in the same or uniform manner) toward the translucent panel 70 as indicated in Figure 3. Further, as shown in Figure 3 and Figure 6, light from the LED is in fact directed to the backside of the translucent panel 70. Thus, Nolan teaches all of the claim limitations.

- 48. Regarding the claims recitation "disposed to directly and uniformly illuminate a back side of the translucent panel," the applicant is advised that, while the features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 44 USPQ2d 1429. In addition, it has been held by the courts that apparatus claims cover what a device is, not what a device does. *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 15 USPQ2d 1525 (Fed. Cir. 1990). In this case, the apparatus of Nolan discloses (as detailed above) all the structural limitations required to perform the recited functional language, and therefore is considered to teach the aforementioned LED lighting apparatus limitations.
- 49. In response to applicant's argument that Nolan teaches away from the Claim 3, 16, and 24 limitation of "directly illuminating the backside of the translucent panel," the examiner disagrees as indicated in the rejections above. Further, a mere allegation of teaching away absent specific and substantial evidence is considered unpersuasive. As

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shown in Figures 3 and 6, light emitted from the LEDs 68 is in fact emitted in a direct fashion toward the backside of the translucent panel 70.

#### Conclusion

- 50. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
- A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.
- 52. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN SPINELLA whose telephone number is (571) 270-1284. The examiner can normally be reached on Monday Friday, from 7:30 a.m. to 5:00 p.m. EST.
- 53. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong-Suk (James) Lee can be reached on (571) 272-7044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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54. Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KJS /Kevin Spinella/ Examiner, Art Unit 2885

> /Hargobind S Sawhney/ Primary Examiner, Art Unit 2885